Civil Air Patrol
Cessna-182T Nav III – N355CP

Preflight Cabin
1. Pitot Tube Cover ..Remove. Check for blockage.
2. Hobbs Time ..... Check.
3. POH ..... Accessible to Pilot.
4. Garmin G1000™ Cockpit Reference Guide..... Accessible to Pilot.
5. Weight & Balance ..... Checked.
6. Parking Brake ..... Set.
7. Control Wheel Lock ..... Remove.

WARNING
When the master switch is on, using an external power source, or manually rotating the propeller, treat the propeller as if the magnetos switch were on. Do not stand, nor allow anyone else to stand, within the arc of the propeller since a loose or broken wire, or a component malfunction could cause the engine to start.

8. MAGNETOS Switch.....Off.
9. AVN Switch (BUS 1&2).....Off.
10. MASTER Switch (BUS 1&2).....On.
11. Primary Flt Display .....Verify On.
12. FUEL QTY (L&R)Check/Reset Used.
13. Tach Time ..... Check.
14. LOW FUEL L & R AnnunciatorsVerify Off.
15. OIL PRESS Annunciator Verify On.
16. LOW VOLTS Annunciator Verify On.
17. LOW VACUUM Annunciator……. .....Verify On.
18. AVIONICS Switch (BUS 1).....On.
19. Forward Avionics Fan.Check Audibly for Operation.
20. AVIONICS Switch (BUS 1).....Off.
21. AVIONICS Switch (BUS 2).....On.
22. Aft Avionics Fan..Check Audibly for Operation.
23. AVIONICS Switch (BUS 2).....Off.
24. PITOT HEAT Switch.....On/Check.
25. Stall Warning System..... Check.
26. PITOT HEAT Switch.....Off.
27. MASTER Switch (ALT & BAT). Off.
28. Trim Controls ..... Takeoff position.
29. FUEL SELECTOR Valve .....Both.
30. ALT STATIC AIR Valve..... Off.
31. Fire Extinguisher.....Verify green.

Preflight Empennage
1. Baggage Compartment Door CHECK latched, lock with key.
2. Rudder Gust Lock .....Remove.
3. Tail Tie-Down ..... Disconnect.
4. Control Surfaces.....Check.
5. Trim Tab..... Check for security.
6. Antennas .....Check.

Preflight Right Wing
1. Aileron .....Check.
2. Flap.....Check.
3. Wing Tie Down ..... Disconnect.
4. Wing Tank Vent Opening .....Check.
5. Main Wheel Tire ....Check Condition

See Fuel Contamination Warning in the POH.

6. Fuel Tank Drain Valves. ... Drain (5).
7. Fuel Quantity .....Check Visually.
8. Fuel Filler Cap ..... Secure and Vent Unobstructed.

Nose
1. Static Source Opening.....Check.
2. Fuel Drains Underside..... Drain(3).

See Fuel Contamination Warning in the POH.

3. Engine Cooling Outlets..... Clear.
4. Propeller & Spinner .....Check.
5. Air Filter .....Check.
6. Nosewheel Strut and Tire.....Check.
7. Engine Oil DipstickCheck oil level and secure. (4 qt min., 8 qt for extended flights)
8. Static Source Opening.....Check.

Preflight Left Wing
1. Main Wheel Tire ...Check Condition.

See Fuel Contamination Warning in the POH.

2. Fuel Tank Drain Valves.... Drain (5).
3. Fuel Quantity..... Visually Check.
4. Fuel Filler Cap..... Secure & Vent unobstructed.

Preflight Left Wing Leading Edge
1. Fuel Tank Vent Opening ..Check for blockage.
2. Stall Warning Opening .....Check for blockage.
3. Wing Tie Down.....Disconnect.
4. Landing/Taxi light(s)..... Check.

Preflight Left Wing Trailing Edge
1. Left Aileron ..... Check.
2. Left Flap ..... Check.

PASSENGER BRIEF
1. **Seat Belts / Shoulder Harness**
2. **Personal Electronic Devices off**
3. **Air Vents / Comfort**
4. **Fire Extinguisher Location / Operation**
5. **Emergency Procedures & Exits**

MISSION BRIEF
1. **Mission Objective**
2. **Destination, WX, Route, Alt, ETE**
3. **NOTAMS**
4. **Crew Coordination & CRM**
5. **Sterile Cockpit Procedures**
6. **Cockpit Layout**
7. **Intercom & Radio Usage**
8. **Seats, Seatbelts, Doors**
9. **Emergency Action & Equipment**

Before Starting Engine
1. Preflight Inspection..... Complete.
2. Passenger Brief ..... Complete.
3. Seats / Belts / Shoulder HarnessAdjust and lock, check initial reel (front & rear).
4. Brakes.....Test & Set.
5. Circuit Breakers ..... Check In.
6. Electrical Equipment .....Off.

Caution (See Complete Caution in POH)

The avionics switch (Bus 1 and 2) must be off during engine start ….

7. Avionics Switch (Bus 1&2)..... Off.
8. Cowl Flaps..... Open.
9. Fuel Selector.....Both.

Starting Engine (Using Battery)
1. Throttle Control..... Open ¼ Inch.
2. Propeller Control.....High RPM.
3. Mixture Control .....Idle Cut Off.
4. Stby Batt Switch.....Test/ (Hold for 20 seconds, verify that green test lamp does not go out), then ARM
5. Engine Indicating System .....Check parameters, (verify no red X's through ENGINE page indicators).
6. Bus E Volts .....Verify 24 volts min.
7. M Bus Volts..... Verify 0 volts.
8. Batt S Amps Verify Discharge (neg).
9. Stby Batt Annunciator ..... Verify On.
10. Propeller Area ..... Clear.
11. Master Switch (Alt and Bat)..... On.

Note
If engine is warm, omit priming procedure of steps 12, 13 and 14 below.

12. Fuel Pump Switch ..... On.
13. Mixture Control..Advance to Full Rich, wait until fuel flow indication is stable, then return to idle cut off position.
14. Fuel Pump Switch ..... Off.
15. Magnetos Switch..... Start.
16. Mixture Control..Advance to full rich when engine starts.

Note
If the engine floods, place the mixture control in the Idle Cut Off position, open the throttle control ½ to full, and engage the starter motor (Start). When the engine starts, advance the mixture control to the Full Rich position and retard the throttle control promptly.

17. Oil Pressure .....Check.
18. Amps (M Batt & Batt S)Check charge (positive).
19. Low Volts Annunciator ... Verify Off.
20. Beacon Light Switch..... On as req.
21. Nav Lights Switch..... On as req.
22. Avionics Switch (Bus1&2) ..... On.
23. Check MFD for correct A/C type and Jeppesen expiration dates, then press ENT.
24. ATIS / AWOS.....Copy.

Taxi

1. Mixture Control.....Lean as required.
2. Brakes.....Test.
3. Heat / Vents / Defrost..As Required.
4. Attitude Indicator Verify Proper Ops.
5. Turn Coordinator.....Verify Ops.
6. H.I. & Compass..Verify Proper Ops.

Before Takeoff - Run-Up

1. Parking Brake ..... Set.
2. Passenger Seat Backs…Most upright position.
3. Seats and Seat Belts..Check Secure.
4. Cabin Doors.....Closed and Locked.
5. Flight Controls.....Free & Correct.
6. Flight Instruments..Check no red Xs.
7. Altimeter:
   - PDF (Baro)..... Set.
   - Standby Altimeter..... Set.
   - KAP 140 Autopilot (Baro).. Set.
8. G1000 Alt Sel..... Set.
9. KAP 140 Altitude Preselect..... Set.

Note

There is no connection between the G1000 Alt Sel feature and the KAP 140 autopilot altitude pre-select or altitude hold functions. G1000 and KAP 140 altitudes are set independently.

10. Standby Flight Instruments. Check.
11. Fuel Quantity ..... Check.

Note

Flight is not recommended when both fuel quantity indicators are in the yellow arc range.

12. Mixture control..... Rich.
13. Fuel Selector Valve..Recheck Both.
14. Elevator & Rudder Trim..Set for Take Off.
15. Manual Electric Trim (MET) Check.
16. Throttle Control.....1800 RPM.
    - Magnetos Switch. Check (RPM drop 175 or 50 differential between magnetos.)
    - Prop Control..Cycle from high to low RPM, return to high RPM (full in).
    - VAC Indicators..... Check.
    - Engine Indicators..... Check.
    - Ammeters & Voltmeters.Check.
17. AnnunciatorsCheck none illuminated.
18. Throttle Control .....Check Idle.
19. Throttle Control 1000 RPM or less.
20. Throttle Friction Lock ..... Adjust.
21. Com Frequency(s) .....Set.
22. Nav Frequency(s) .....Set.
23. FMS/GPS Flight Plan.. As Desired.

Note

Check GPS 2 avail. on Aux Status page.

24. XPDR .....Set.
25. CDI Softkey.....Select NAV source.

Caution (See Full Caution in POH)

The G1000 HSI does not provide a warning "Flags". The missing D-Bar is considered to be the warning flag.

WARNING
(See Full Warning in POH)
Interruption of NAV signal to the autopilot will cause autopilot to revert to ROL mode with NO warning chime or PFD annunciation.

26. Autopilot .....Check then Off.
27. Wing Flaps..0°-20°(10º preferred).
28. Cowl Flaps ..... Open.
29. Cabin Windows..Closed & Locked.
30. Time ..... Record.
31. Strobe/Pulse Lights Switch ..... On.
32. Brakes.....Release.

Takeoff

1. Flaps.....0°-20°(10º preferred).
2. Throttle Control..... Full.
3. Propeller Control..... 2400 RPM.
4. Mixture Control….Full Rich, above 5000 ft. alt., lean for max. RPM.
5. Rotate .....50-60 KIAS.
6. Normal Climb Speed .....80 KIAS.
   - Short Field T.O.20°Flaps / 58 KIAS Until Clear.
   - Soft Field T.O .20°Flaps / Ground Effect ASAP.
6. Wing Flaps . Retract at safe altitude.

Normal Climb

1. Airspeed .....85-95 KIAS.
2. Throttle..23 Inches or Full (If less than 23 in. Hg.).
3. Propeller Control..... 2400 RPM.
4. Mixture…..15 GPH or Full Rich (If less than 15 GPH).
5. Fuel Selector ..... Both.
6. Cowl Flaps .....Open as required.

Cruise

1. Power15-23 In. & 2000-2400 RPM (no more than 80%).
2. Elevator & Rudder Trim ..... Adjust.
3. Mixture .....Lean.
4. Cowl Flaps ... Closed or as required.
5. FMS/GPS.. ..... Review & Brief.

Descent

1. Power ..... As Desired.
2. Mixture ..... Enrich as required.
3. Cowl Flaps ..... Closed.
4. Altimeters:
   - PDF (Baro).....Set.
   - Standby Altimeter.....Set.
   - KAP 140 Autopilot (Baro) Set.
5. G1000 Alt Sel .....Set.
6. KAP 140 Altitude Preselect.....Set.

Note

See note 1 under Before Takeoff – Run-Up.

7. CDI Softkey....Select NAV source.
8. FMS/GPS .....Review & Brief.

See Caution in Before Takeoff Run-up.

See Warning in Before Takeoff-Run-up.

9. Fuel Selector valve.....Both.
10. Wing Flaps .....As Desired.

Before Landing

1. Pilot and Passenger Seat Backs Most Upright Position.
2. Seats & Seat Belts..Secured & Lock.
3. Fuel Selector .....Both.
4. Mixture Control..... Rich.
5. Propeller Control .....High RPM.
6. Landing & Taxi Light Switches On.
7. Autopilot ..... Off.

Normal Landing

1. Airspeed ... 70-80 KIAS (Flaps Up).
2. Wing Flaps .....As Desired.
3. Airspeed..60-70 KIAS (Full Flaps).
4. Trim..... Adjust.
5. Touchdown..... Main Wheel First.
6. Landing Roll .....Lower Nosewheel.
7. Braking .....As Required.

Balked Landing

1. Power... Full Throttle & 2400 RPM.
2. Wing Flaps.....Retract to 20°.
3. Climb Speed .....55 KIAS.
4. Flaps..Retract Slowly (above 70 KIAS).
5. Cowl Flaps .....Open.

After Landing (Clear of Runway)

1. Wing Flaps..... Up.
2. Cowl Flaps .....Open.
3. Lights .....As Required.
4. Transponder ..GND/STBY & 1200.
5. Mixture .....Lean.
6. Pitot Heat .....Off.

Securing Aircraft

1. Parking Brake ..... Set.
2. Throttle Control.....Idle.
3. Electrical Equipment.....Off.
4. Avionics Switch (Bus 1&2).....Off.
5. Magnetos..... Check for Ground.
6. Mixture..... Idle Cut Off.
7. Magneto & Master Switch.....Off.
8. Tach Time .....Check/Record.
9. Stby Batt Switch.....Off.
10. Control/Avionics Lock ..... Install.
11. Parking Brake ..... Off.
12. Cowl Flaps ..... Closed.
13. Fuel Selector ..... Right.
14. Aircraft..... Secured & Locked.
15. Flight Plan ..... Closed.

This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs.

Reviewed by:

_____

Wing Director of Maintenance Date

EMERGENCY PROCEDURES

C-182T N355CP

Engine Failure During Takeoff Roll

1. Throttle Control.....**Idle.**
2. Brakes..... **Apply.**
3. Wing Flaps..... Retract.
4. Mixture Control... Idle Cut-Off.
5. Magnetos Switch.....Off.
6. Stby Batt Switch.....Off.
7. Master Switch (Alt & Bat). Off.

Engine Failure Immediately After Takeoff

1. Airspeed .....
75 KIAS (Flaps Up).
70 KIAS (Flaps Down).
2. Mixture Control... Idle Cut-Off.
3. Fuel shutoff valve.....Off.
4. Magnetos Switch.....Off.
5. Wing Flaps.....As req. (Full Recommended)
6. Stby Batt Switch.....Off.
7. Master Switch (Alt & Bat). Off.
8. Cabin Door.....Unlatch.
9. Land..... Straight Ahead.

Engine Failure During Flight (Restart Procedures)

1. Airspeed ..... 75 KIAS
(best glide speed).
2. Fuel Selector Valve.....Both.
3. Fuel Pump Switch.....On
4. Mixture.....Rich
5. Magnetos Switch..... Both
(or Start if propeller is stopped)

Note

If propeller is windmilling, engine will restart automatically within a few seconds. If propeller has stopped (possible at low speeds), turn Magnetos switch to Start, advance throttle slowly from idle, and lean the mixture from full rich, as required to obtain smooth operation.

6. Fuel Pump Switch.....Off

Note

If the indicated fuel flow (FFLOW GPH) immediately drops to zero, a sign of failure of the engine-driven fuel pump, return the Fuel Pump switch to the On Position.

Emergency Landing Without Engine Power

1. Passenger Seat Back ..... Most Upright Position.
2. Seats and Seat Belts .. Secure
3. Airspeed .....
75 KIAS (Flaps Up).
70 KIAS (Flaps Down).
4. Mixture Control ... Idle Cut-Off.
5. Fuel Selector Valve.....Off.
6. Magnetos Switch.....Off.
7. Wing Flaps.....As req. (Full Recommended)
8. Stby Batt Switch.....Off.
9. Master Switch (Alt & Bat) ...Off (when landing is assured).
10. Doors..... Unlatched Prior To Touchdown.
11. Touchdown Slightly Tail Low.
12. Brakes ..... Apply Heavily.

Precautionary Landing With Engine Power

1. Passenger Seats ... Most Upright Position.
2. Seats and Seat Belts ..... Secure.
3. Airspeed ..... 75 KIAS.
4. Wing Flaps.....20º.
5. Selected Field....Fly Over, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
6. Avionics Switch (Bus1 & 2)...Off.
7. Electrical Equip. Switches.....Off.
8. Wing Flaps ..... Full (on final approach).
9. Airspeed .....70 KIAS.
9. Stby Batt Switch .....Off.
10. Master Switch (Alt and Bat) Off.
11. Doors.....Unlatch Prior To Touchdown.
12. Touchdown.... Slightly Tail Low.
13. Mixture Control ..... Idle Cut Off.
14. Magnetos Switch .....Off.
15. Brakes ..... Apply Heavily.

Ditching

1. Radio..... Transmit Mayday on 121.5, giving location and intentions and Squawk 7700.
2. Heavy Objects (in baggage area) Secure Or Jettison (if possible).
3. Passenger Seat Backs .....Most Upright Position.
4. Seats and Seat Belts ..... Secure.
5. Wing Flaps .....20º to Full.
6. Power .....Establish 300 Ft/Min descent at 65 KIAS.

Note

If no power is available, approach at 70 KIAS with flaps up or at 65 KIAS with 10º of Flaps.

7. Approach
High winds, Heavy Seas .....Into the Wind.
Light winds, Heavy Swells.....
Parallel to Swells.
8.Cabin Doors .....Unlatch.
9. Touchdown.....Level Attitude At Established Rate-Of-Descent.
10. Face..... Cushion at touchdown with folded coat.
11. ELT ..... Activate.
12. Airplane..... Evacuate through cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened.
13. Life Vests and Raft..... Inflate When Clear Of Airplane.

Fire During Start On Ground

1. Magnetos Switch.....Start
(continue cranking to start engine).
If Engine Starts:
2. Power.....1700 RPM for a few minutes.
3. Engine....Shut Down and inspect for damage.
If Engine Fails To Start:
2. Throttle Control.....Full Open.
3. Mixture Control ....Idle Cut-Off.
4. Magnetos Switch.....Start (continue cranking).
5. Fuel Selector Valve ..... Push Down and Rotate Off.
6. Fuel Pump Switch.....Off.
7. Magnetos Switch.....Off.
8. Stby Batt Switch.....Off.
9. Master Switch (Alt & Bat) ..Off.
10. Engine.....Secure.
11. Parking Brake ..... Release.
12. Fire Extinguisher .....Obtain.
13. Airplane..... Evacuate.
14. Fire ..... Extinguish using fire extinguisher, wool blanket, or dirt.
15. Fire Damage ..... Inspect…

suitable airport or landing area.

Engine Fire in Flight

1. Mixture Control....Idle Cut-Off.
2. Fuel Selector Valve ..... Push Down and Rotate to Off.
3. Fuel Pump Switch .....Off.
4. Stby Batt Switch.....Off.
5. Master Switch (Alt & Bat)..Off.
6. Cabin Heat and Air ..... Off (except overhead vents).
7. Airspeed..... 100 KIAS. (If fire is not extinguished, increase glide speed to find an airspeed, within airspeed limitations, which will provide an incombustible mixture).
8. Forced Landing ..... Execute. Refer to Emergency Landing Without Power.

Electrical Fire in Flight

1. Stby Batt Switch.....Off.
2. Master Switch (Alt & Bat)..Off.
3.Vents/Cabin Air/Heat... Closed.
4. Fire Extinguisher..... Activate.
5. Avionics Switch (Bus 1 & 2). Off.
6. All Other Switches (except magnetos switch) ..... Off.

Warning
After The Fire Extinguisher Has Been Used, Make Sure That The Fire Is Extinguished Before Exterior Air Is Used To Remove Smoke From Cabin.

7. Vents/Cabin Air/Heat..... Open when it is ascertained that fire is completely extinguished.
If fire has been extinguished and electrical power is necessary for continued flight to nearest
8. Circuit Breaker..Check for Open circuit(s), do not reset.
9. Master Switch (Alt & Bat) .....On.
10. Avionics Switch (Bus 1).....On.
11. Avionics Switch (Bus 2).....On.

Cabin Fire

1. Stby Batt Switch ..... Off.
2. Master Switch (Alt & Bat) . Off.
3. Vents/Cabin Air/Heat ...Closed (to avoid drafts).
4. Fire Extinguisher .....Activate.

See Warning Under Electrical Fire in Flight.

5. Vents/Cabin Air/Heat .....Open when it is sure that fire is completely extinguished.
6. Land the airplane as soon as possible to inspect for damage.

Wing Fire

1. Land &Taxi Light Switches...Off.
2. Nav Light Switch .....Off.
3. Anticollision Strobe Light Switch Off.
4. Pitot Heat Switch .....Off.

Note
Perform a sideslip to keep the flames away from the fuel tank and cabin. Land as soon as possible using flaps only as required for final approach and touchdown.

High Main Battery Charge Current (M Bat Amps More Than 40)

1. Master Switch (ALT) .....Off.
2. Nonessential Elect. Equip. ...Off.
3. Avionics Switch (Bus 1&2) ...Off.
4. Flight..... Terminate as soon as practical.

Air Data System Failure

Red X – PFD Airspeed Indicator

1. ADC/AHRS Circuit Breakers Check In (ESS Bus and AVN Bus 1). If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
2. Standby Airspeed Indicator..Use for airspeed information.

Red X – PFD Altitude Indicator

1. ADC/AHRS Circuit Breakers… Check In (ESS BUS and AVN Bus 1). If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
2. Standby Altimeter .....Check current barometric pressure Set. Use for Altitude Information.

Attitude And Heading Reference System (AHRS) Failure

Red X – PFD Attitude Indicator

1. ADC/AHRS Circuit Breakers… Check In (ESS BUS and AVN Bus 1).). If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
2. Standby Attitude Indicator ...Use for attitude information.

Red X – Horizontal Situation Indicator (HSI)

1. ADC/AHRS Circuit Breakers… Check In (ESS BUS and AVN Bus 1). If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.
2. Non-Stabilized Magnetic Compass Use for heading information.

Display Cooling Advisory

PFD1 Cooling or MFD1 Cooling Annunciator(s)
1. Cabin Heat.....Reduce to min.
2. Forward Avionics Fan ..... Check (feel for airflow from screen on glareshield).
If Forward Avionics Fan Has Failed
3. Stby Batt Switch..... Off (unless needed for emergency power).
If PFD1 Cooling or MFD1 Cooling Annunciator Does Not Go Off Within 3 Minutes Or If Both PFD1 Cooling And MFD1 Cooling Annunciators Come On
3. Stby Batt Switch.....Off (Land as soon as practical).

Vacuum System Failure

Low Vacuum Annunciator Comes On

Caution
If Vacuum Pointer Is Out Of The Green ARC During Flight Or The Gyro Flag Is Shown On The Standby Attitude Indicator, The Standby Attitude indicator Must Not Be Used For Attitude Information.

1. Vacuum Indicator (VAC)…
Check EIS System page to make sure vacuum pointer is in the green arc limits.

For all other Emergency/Abnormal Procedures. See the POH – Section 3.

Reviewed by:

_____
Wing Director of Maintenance
Date: